

## Recovery Plan Action Status

**Plan Name:** Kern Primrose Sphinx Moth Recovery Plan

**Plan Status:** Final

**Plan Date:** 08-Feb-84

**Lead Agency:** USFWS

**Lead Office:** Sacramento Fish And Wildlife Office

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414-6600 )

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Kern primrose sphinx moth (Euproserpinus euterpe)	1	11	Patrol known habitat during flight season	Ongoing Not Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Law Enforcement Division, California Department of Fish and Game	Other: Law Enforcement	Internal Field Assistance	Patrol at new population sites by BLM at Carrizo Plains sites.
Kern primrose sphinx moth (Euproserpinus euterpe)	1	12	Enforce applicable State and Federal laws	Ongoing Current	FY 2005		U.S. Fish and Wildlife Service, Law Enforcement Division, California Department of Fish and Game	Other: Regulations	Internal Technical Assistance	Coordinating with Ventura Office regarding Section 7 consultations.
Kern primrose sphinx moth (Euproserpinus euterpe)	3	13	Evaluate effectiveness of applicable laws and regulations	Not Started			U.S. Fish and Wildlife Service, Law Enforcement Division, U.S. Fish and Wildlife Service, Endangered Species Division	Research: Habitat Requirements	Contract, Internal Technical Assistance	
Kern primrose sphinx moth (Euproserpinus euterpe)	2	2111	Analyze extent and effect of use of filaree for oviposition	Complete	FY 2000 - FY 2004	FY 2005	U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Habitat Requirements	Contract, Internal Technical Assistance	
Kern primrose sphinx moth (Euproserpinus euterpe)	2	21121	Assess alternatives to augment host plant availability	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Propagation	Contract, Internal Technical Assistance	
Kern primrose sphinx moth (Euproserpinus euterpe)	2	211221	Test use of herbicides to control filaree	Obsolete			U.S. Fish and Wildlife Service, Endangered Species Division	Work type not yet selected	Labor type not yet selected	
Kern primrose sphinx moth (Euproserpinus euterpe)	2	211222	Test physical removal of filaree	Obsolete			U.S. Fish and Wildlife Service, Endangered Species Division	Work type not yet selected	Labor type not yet selected	Mechanical control is not feasible.

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Kern primrose sphinx moth (Euproserpinus euterpe)	2	211223	Test the effects of livestock grazing on filaree dominated areas	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Management Techniques	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance	
Kern primrose sphinx moth (Euproserpinus euterpe)	2	212	Determine if movement by larvae from filaree to host plant is possible	Complete	FY 2000 - FY 2004	FY 2005	U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Habitat Requirements, Research: Migration	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance	2008 report revealed larvae are capable of traversing between plants. It was believed previously that the larvae were physically confined to the plant on which they were oviposited. This is not true.
Kern primrose sphinx moth (Euproserpinus euterpe)	2	213	Assess extent of predation, parasitism, disease and other mortality factors on sphinx moth larvae	Ongoing Current	FY 2007		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Demographic Studies, Research: Disease, Research: Predation	Contract, Internal Field Assistance	Contract work to assess extent of parasitism and effect on moth host in progress, began spring 2007.
Kern primrose sphinx moth (Euproserpinus euterpe)	2	214	Investigate requirements of the sphinx moth pupae	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Reintroduction	Contract, Internal Technical Assistance, Species Expert	Study to determine depth of pupation in sandy soil started spring 2007. Established a depth at which pupae are buried, and discovered that pupation occurs within the depth affected by agricultural discing of the soil.
Kern primrose sphinx moth (Euproserpinus euterpe)	2	221	Determine native species to be planted as nectar sources	Partially Complete	FY 2005		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Other Information	Contract, Internal Technical Assistance	
Kern primrose sphinx moth (Euproserpinus euterpe)	2	222	Plant selected native nectar sources	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Propagation	Contract, Internal Field Assistance, Volunteer	

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Kern primrose sphinx moth (Euproserpinus euterpe)	1	231	Conduct annual survey of present and potential sphinx moth habitat and relate to relationships of naturally occurring physical and biological factors on sphinx moth population fluctuations	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: General, Research: Other Information, Research: Population Surveys	Contract, Internal Field Assistance, Internal Technical Assistance	Annual surveys at Carrizo Plains are being completed using USFWS funding. New sites with KPSP occurrences within the Carrizo Plain have been discovered from 2005-2008 seasons. Walker Basin population is not routinely surveyed.
Kern primrose sphinx moth (Euproserpinus euterpe)	2	232	Examine effects of agricultural grazing and development	Unknown			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Habitat Requirements, Research: Habitat Status, Research: Management Techniques	Contract, Internal Field Assistance, Internal Technical Assistance	This task originally was-examine effects of grazing and agricultural development. Apparently, grazing and trampling by grazing animals has a negative impact from incidental observations.
Kern primrose sphinx moth (Euproserpinus euterpe)	1	241	Pursue management agreement with local landowners to reduce adverse effects of pesticide use	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Acquisition: Management Agreement	Internal Technical Assistance	
Kern primrose sphinx moth (Euproserpinus euterpe)	1	242	Secure habitat through development and implementation of a land protection plan	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Land Acquisition Program, California Department of Fish and Game	Acquisition	Internal Technical Assistance	
Kern primrose sphinx moth (Euproserpinus euterpe)	2	31	Conduct habitat surveys to determine possible translocation sites	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Habitat Status	Contract, Internal Technical Assistance	Additional populations have been found at Carrizo Plain and in the Cuyama Valley since 2005.
Kern primrose sphinx moth (Euproserpinus euterpe)	2	32	Secure habitat at translocation sites through development and implementation of land protection plan	Not Started			U.S. Fish and Wildlife Service, Land Acquisition Program, California Department of Fish and Game	Acquisition, Acquisition: Easement	Contract, Internal Technical Assistance, Species Expert	

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Kern primrose sphinx moth (Euproserpinus euterpe)	2	33	Develop propagation techniques, if necessary	Complete	FY 2005		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Reintroduction	Contract, Internal Technical Assistance, Species Expert	Begin in FY4. Completed by Ken Osborn in 2008. Controlled propagation methodology presented in report to USFWS in 2008. USFWS funded project. Contains significant life history information, including motility of larvae and pupal depth.
Kern primrose sphinx moth (Euproserpinus euterpe)	2	34	Develop translocation techniques	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Other Information	Contract, Internal Technical Assistance, Species Expert	Begin in FY4
Kern primrose sphinx moth (Euproserpinus euterpe)	2	35	Implement transplant action	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Reintroduction	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	Begin in FY5
Kern primrose sphinx moth (Euproserpinus euterpe)	2	36	Monitor transplanted populations by annual surveys	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Other, Research: Population Surveys	Internal Field Assistance	Begin in FY5
Kern primrose sphinx moth (Euproserpinus euterpe)	2	41	Conduct informational meetings	Ongoing Current	FY 2005		U.S. Fish and Wildlife Service, Endangered Species Division	Other: Information and Education	Internal Technical Assistance	Have ongoing working group that meets annually to discuss strategy. Have website which is used to update group on KPSM work being done.
Kern primrose sphinx moth (Euproserpinus euterpe)	2	42	Distribute audio-visual program for schools	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division	Other: Information and Education	Internal Technical Assistance	
Kern primrose sphinx moth (Euproserpinus euterpe)	2	43	Prepare and distribute local press releases	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division	Other: Information and Education	Internal Technical Assistance	